widely separated punctures, which become obsolete toward

apices; pubescence short and inconspicuous.

Ventral surface lighter in color than above; abdomen sparsely punctured with very fine punctures, a long hair arising from each depression.

Length 14 mm.; width 3.5 mm.

Described from a specimen labeled Grant County, New Mexico, July 15, R. T. Kellogg collector. Type in writer's collection.

The Sexes of Harroweria gloriosa Hebard (Orthoptera; Tettigoniidae; Phaneropterinae).

By Morgan Hebard.

On September 9, 1932, an orchid plant (Oncidium stipit-sutum) was shipped from the Canal Zone, Panama, to Hawaii, which plant was found to be bearing a number of eggs of a katydid. From these O. H. Swezey reared the larval and the adult specimens described below. The eggs hatched in Honolulu from March 20 to April 13, 1933, and adults matured from May 26 to July 2 of that year. Eight males and three females were reared to maturity, eight immatures being preserved to show the six instars through which the insect passes before the adult condition is reached. The species proves to be Harro-teeria gloriosa Hebard, of which a color figure of the unique female type was printed at the time of original description.

The immatures in their earliest instar bear only one of the hairy sections of the antennae characteristic of the species. In the next instar two such sections are present and in the following instars three or four (as in the adults). The earliest instars are black with a small greenish white mark meso-dorsad on the caudal femora, but later all the markings shown by adults on the body and limbs appear.

The most interesting feature which the series reveals is the fact that the adult male has an entirely different tegminal and wing coloration from that of the adult female. Such sexual dimorphism is so very rare in the Orthoptera that any specialist

¹ Trans. Amer. Ent. Soc., LIII, p. 89, pl. XVIII, fig. 2 (1927).

might well have believed distinct species to be represented had the present series not been raised from the same lot of eggs. Unlike the female the male has the tegmina in proximal twothirds with the half toward the sutural margin transparent pale brownish buff with cross-veinlets transparent greenish white. The tegmina elsewhere are as in the female, blackish brown with cross-veinlets pale brownish buff and two transverse bands of the latter distad, of which the first is broader but more broken than the apical band. Much more unlike the female are, however, the wings of the male, which have their entire proximal portion (including about two-fifths of their entire surface) transparent whitish (in four specimens immaculate, but in two with every minute cross-vein very finely margined on each side with brown). The wings elsewhere are exactly as in the female, brilliant metallic purple black with distal portion of anterior field strikingly white, blackish brown, pale brownish buff and again blackish brown.

The male cerci are simple, slender, clongate, weakly sigmoid and moderately flattened distad and terminate in a small triangular tooth. The male subgenital plate is slender distad, there with a deep and narrow U-emargination, the lateral apices so formed truncate and each bearing a small, simple, socketed style.

The genus is shown by these males to be, as we supposed, a member of the Group Ceraiae. The species is one of the most brilliantly colored and distinctively specialized of all katydids. The fact that only one adult specimen has ever been secured in collecting indicates that, like many katydids, the insect is nocturnal, probably hiding during the day in recesses in the thickest of tropical forest foliage.

Manual of Myiology, by Charles H. T. Townsend.

Recent advices from the author state that the size of the edition will be determined by the number of subscriptions received prior to March 1, 1934, as it is planned to issue Part I on that date. We are also advised that, in view of the action taken by the International Zoological Congress in Padua, the Meigen 1800 names will not be employed in the work. Address Charles Townsend & Filhos, Itaquaquecetuba, E.F.C.B., São Paulo, Brazil.